



Interventional Cardiology

**RACIAL DISPARITIES AND TEMPORAL TRENDS IN DEMOGRAPHICS AND CLINICAL CHARACTERISTICS OF PATIENTS SCREENED FOR TRANSCATHETER AORTIC VALVE REPLACEMENT**

Poster Contributions  
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**Background:** The broadening indications following the U.S. Food and Drug Administration approval of transcatheter aortic valve replacement (TAVR) have increased the treatment options for patients with severe aortic stenosis. It remains uncertain how these changes have influenced the demographics and characteristics of TAVR referrals.

**Methods:** We retrospectively analyzed all patients referred to our center for TAVR from 2010 to 2016. The patients were stratified into tertiles based on referral year (T1: 2010-2011, T2: 2012-2013, T3: 2014-2016). The baseline demographics and characteristics were compared between each cohort.

**Results:** 1,814 patients (83.0% caucasian, 13.0% black) were referred for TAVR. There was no difference in racial composition between the tertiles. Over a similar time period, 36.0% of patients referred for percutaneous coronary intervention were black (p<0.0001). Compared to the T1 cohort, T3 had a lower mean STS score (6.9±4.0 vs 9.8±5.8, p<0.001), less severe heart failure symptoms (72.8% vs 84.0%, p<0.001) and coronary artery disease (65.7% vs 75.8%, p=0.03) but more severe chronic obstructive pulmonary disease (17.4% vs 7.9%, p<0.001).

**Conclusions:** Referrals for TAVR have increased while baseline characteristics reflect a lower risk population, paralleling the expanded commercialization and trials involving intermediate risk patients. Despite broadening indications and more informed medical community, the disparity in race of TAVR referrals has not changed.

Characteristic	T1 (N=476)	T2 (N=577)	T3 (N=761)	P value
Age - yr	82.3	81.8	69.3	
Male sex - no. (%)	228 (47.9)	309 (53.6)	389 (51.1)	0.188
Race, white - no. (%)	342 (82.0)	353 (85.3)	597 (82.7)	0.403
Race, black - no. (%)	52 (12.5)	47 (11.4)	98 (13.6)	0.550
STS score	9.8±5.8	7.0±4.1	6.9±4.0	<0.001
NYHA Class III or IV (%)	84.0	85.8	72.8.0	<0.001
Coronary artery disease (%)	75.8	66.7	65.7	0.030
Prior myocardial infarction (%)	19.4	14.5	16.6	0.337
Prior coronary artery bypass grafting (%)	29.8	25.7	28.2	0.576
Prior percutaneous coronary intervention (%)	26.9	24.7	25.4	0.843
Prior balloon aortic valvuloplasty (%)	6.1	6.9	11.0	0.045
Cerebral vascular disease (%)	19.7	20.3	17.0	0.481
Peripheral vascular disease (%)	28.8	30.5	24.5	0.194
COPD, Any (%)	31.5	30.1	40.7	0.006
COPD, Severe (%)	7.9	8.7	17.4	<0.001
eGFR (mL/min)	57.1±24	67.4±27	66.9±24	<0.001
Atrial fibrillation (%)	38.7	44.9	38.8	0.208
Porcelain aorta (%)	1.9	2.5	6.0	0.009
Aortic valve area (cm <sup>2</sup> )	0.72±0.2	0.7±0.2	0.72±0.2	0.428
Aortic valve gradient (mmHg)	42.2±16	43.6±14	44.1±13	0.352
Left ventricular ejection fraction (%)	48.9±16	50.6±15	51.4±14	0.035
Moderate or severe mitral regurgitation (%)	4.2	2.1	2.7	0.200